IS THERE ANY CORRELATION BETWEEN THE CHRONIC BALANCE OF TRADE DEFICIT AND THE ROMANIA'S INCREASING EXTERNAL DEBT?

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According to the data provided by the Romanian National Institute of Statistics and Eurostat, the balance-of-payments current account registered a permanent and increasing deficit since 1990, while the domestic production was accelerated decreasing and the FDI inflows were far from being enough to cover the internal consumption needs. These being the facts, the present paper aims to underline the fact there is a direct correlation between the increasing external debt of Romania in the last years, and the balance of trade increasing deficit, which is due mainly to the lack of domestic capital, as well as to the decreasing productivity. The research methodology is based on a theoretical model of external debt sustainability, using time series data for Romania and using a multi-equation model.

The results show that the higher the imports, the higher the external debt, and as a consequence, the higher the balance of trade deficit, if the productivity is low. This result is consistent with the Romanian experience, and its implications are very large and will multiply over the years, if there will be no adequate policies meant to revival the private sector, mainly the SMEs.

Sustainable debt is the level of debt which allows a debtor country to meet its current and future debt service obligations in full, without recourse to further debt relief or rescheduling, avoiding accumulation of arrears, while allowing an acceptable level of economic growth. In this respect, the paper concludes that the Romanian government should immediately take the necessary measures to facilitate the easy access to capital for the private investors, which will further stimulate the internal production, with a direct impact onto the increase of exports, which will determine on the one hand, the reduction of the balance of trade deficit and simultaneous, the increasing of the necessary budgetary revenues to pay back the external debt. Otherwise, all costs will be supported by the next generations, with no return, if the probability for declaring "default" will be successfully surpass in the short run.

Key words: Romanian external trade, balance of trade, current account deficit, external debt
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1. Introduction.

According to the data provided by the Romanian National Institute of Statistics and Eurostat, the balance-of-payments current account registered a permanent and increasing deficit since 1990, while the domestic production was accelerated decreasing and the FDI inflows were far from being enough to cover the internal consumption needs. The relationship between external debt and external trade deficit is complicated for several reasons. Firstly, there is a relationship between external debt servicing and trade deficit. Secondly, government policies designed to influence the external trade balance, domestic interest rates and employment may affect the stock of foreign debt and hence, debt servicing and trade deficit both directly and indirectly through their effects on exports, domestic savings and foreign capital inflows. Thirdly, there may be a two way relationship between debt stock and debt servicing. Finally, long term capital inflows, depending on its characteristics may also affect trade deficit, investment and debt stock. Moreover, capital inflows could be affected by economic growth. Statistical methods for systems of simultaneous equations capture the mutual dependence among the variables in the model.

1.1. The balance of trade deficit

The balance of trade is part of a larger economic unit, the balance of payments, which represents the difference in value over a period of time between an economy's (which can be a country, a region etc.) imports and exports of goods and services and includes all economic transactions between residents of one country and those of other countries. The concept of balance of trade first became important in the 16th and 17th cent. with the growth of mercantilism, and represents the relation between the merchandise exports and imports of a country. The balance of trade does not include money re-spent on foreign stock, nor does it factor in the concept of importing goods to produce for the domestic market. When an economy's exports exceed its imports, it can be said that that economy has a favourable balance of trade, or a trade surplus. When the imports exceed exports, it can be said that an unfavourable balance of trade, or a trade deficit, exists. However, the balance of trade should be viewed in the context of the country's entire international economic position. For example, a country may consistently have an unfavorable balance of trade that is offset by considerable exports of services; this country would have a balanced current account and a good international economic position.

Under mercantilism a favourable balance of trade was considered absolute necessary in order to bring money , into the country, which they confused with wealth, while the classical economists, starting with David Hume, Adam Smith, David Ricardo, and John Stuart Mill, considered that more important for a nation is to utilize its economic resources fully than to obtain a trade surplus and concerned themselves with theories on the adjustment of balance of trade. The 19th century economist and philosopher Frédéric Bastiat expressed the idea that trade deficits actually were a manifestation of profit, rather than a loss. He proposed as an example to suppose that he, a Frenchman, exported French wine and imported British coal, turning a profit. He supposed he was in France, and sent a cask of wine which was worth 50 francs to England. The customhouse would record an export of 50 francs. The customhouse is valuing imports and exports based on the good's value in their home country, not the price paid when the actual international trade occurs as is conventionally done when calculating the trade balance. Correcting for the accounting error a neutral conclusion is reached: France sells wine for 70 and buys coal for 70, and Bastiat's profit does not come from England but simply from trading goods within France.

By *reductio ad absurdum*, Bastiat argued that the national trade deficit was an indicator of a successful economy, rather than a failing one, and predicted that an unsuccessful, shrinking economy would result in lower trade deficits. The idea of the undesirability of trade deficits persisted in the post-war period, however, and arguments against deficits are often advanced by the advocates of protectionism.

Table 1. Countries ranked by current account balance

Rank	**Country**	**CAB (billion US dollars)**	**Rank**	**Country**	**CAB (billion US dollars)**
1	People's Republic of China	305.400	**171**	Colombia	–5.946
2	Germany	188.400	**172**	Czech Republic	–5.956
3	Japan	166.500	**173**	Lebanon	–6.972
4	Russia	71.130	**174**	Mexico	–7.000
5	Norway	60.230	**175**	Morocco	–7.922
6	Saudi Arabia	52.030	**176**	**Romania**	**–7.934**
7	Switzerland	49.350	**177**	Vietnam	–12.220
8	Netherlands	46.690	**178**	Poland	–12.330
9	Singapore	44.080	**179**	South Africa	–16.510

Rank	Country	CAB (billion US dollars)	Rank	Country	CAB (billion US dollars)
10	Republic of China (Taiwan)	39.000	**180**	Greece	–17.100
11	Kuwait	38.200	**181**	Portugal	–19.030
12	South Korea	36.350	**182**	India	–26.910
13	Malaysia	34.140	**183**	Australia	–35.230
14	Nigeria	27.770	**184**	Turkey	–38.820
15	Venezuela	22.070	**185**	Canada	–40.210
16	Sweden	21.680	**186**	United Kingdom	–40.340
17	Qatar	20.110	**187**	Brazil	–52.730
18	Hong Kong	18.070	**188**	France	–53.290
19	Azerbaijan	15.960	**189**	Italy	–61.980
20	Libya	15.530	**190**	Spain	–63.650
21	Denmark	14.350	**191**	European Union	–261.910
22	Thailand	12.290	**192**	United States	–561.000
23	Austria	9.900			

Note: This is a list of countries and territories by current account balance (CAB), based on data from 2010, as listed in the World Trade Report released by the WTO

Since the 1990s the value of Romania’s imports has greatly exceeded exports, resulting in large trade deficits that complicated Romania’s relations with its trading partners, particularly EU Member States (see *Table 3*). The issue of trade deficits can be complex. Trade deficits generated in tradeable goods such as manufactured goods or software may impact domestic employment to different degrees than trade deficits in raw materials. Correspondingly, Romania with its lower savings rate has run high trade deficits. Romania generally has lower savings rates than its trading partners, which tend to have trade surpluses.

1.2. The external debt in theory

The *external debt* (or the *foreign debt*) is that part of the total debt in a country that is owed to creditors outside that country and represents the portion of a country's debt that was borrowed from foreign lenders including commercial banks, other governments or international financial institutions such as the International Monetary Fund (IMF) and the World Bank. A debt crisis can occur if a country with a weak economy is not able to repay external debt due to the inability to produce and sell goods and make a profitable return. Here debt liabilities include arrears of both principal and interest; *Principal and Interest* - when this cost is paid periodically, as commonly occurs, it is known as an interest payment. All other payments of economic value by the debtor to the creditor that reduce the principal amount outstanding are known as principal payments. Also, the definition does not specify that the timing of the future payments of principal and/or interest need be known for a liability to be classified as debt; *Residence* - to qualify as external debt, the debt liabilities must be owed by a resident to a nonresident. Generally external debt is classified into four heads, as follows: public and publicly guaranteed debt; private non-guaranteed credits; central bank deposits; and loans due to the IMF. However the exact treatment varies from country to country.

Table 2. Countries ranked by external debt

Rank	Country	External Debt Bn. US dollars	Per capita US dollars	% of GDP	Rank	Country	External Debt Bn. US dollars	Per capita US dollars	% of GDP
1	United States	15041,163	47,568	99	**31**	Argentina	160,9	3,971	43
—	EU	13720	27,864	85	**32**	Hungary	148,4	14,821	115
2	United Kingdom	8981	144,338	400	**33**	United Arab Emirates	122,7	24,273	41
3	Germany	4713	57,755	142	**34**	**Romania**	**108,9**	**5,082**	**67**
4	France	4698	74,619	182	**...**				
5	Japan	2441	19,148	45	**38**	Israel	89,68	12,070	42
6	Ireland	2378	519,070	1,165	**39**	Czech Republic	86,79	8,260	45
7	Italy	2223	36,841	108	**40**	Saudi Arabia	82,92	3,176	19
8	Spain	2166	47,069	154	**...**				
9	Luxembourg	1892	3,696,467	3,443	**47**	Croatia	59,7	13,519	99
10	Belgium	1241	113,603	266	**48**	Slovakia	59,33	10,926	68
11	Switzerland	1200	154,063	229	**49**	Colombia	57,74	1,269	20
12	Australia	1169	52,596	95	**...**				
13	Canada	1009	29,625	64	**54**	Slovenia	51,57	25,555	108
14	Sweden	853,3	91,487	187	**55**	Bulgaria	47,15	6,261	99
15	Austria	755	90,128	200	**...**				
16	Norway	643	131,220	141	**57**	Latvia	37,28	16,584	155
17	Denmark	559,5	101,084	180	**...**				
18	Greece	532,9	47,636	174	**61**	Cyprus	32,61	37,812	129
19	China	529,2	396	5	**62**	Serbia	30,9	4,178	80
20	Portugal	497,8	46,795	217	**63**	Egypt	30,61	391	14
21	Russia	480,2	3,421	33	**64**	Lithuania	27,6	8,381	76
22	Netherlands	371,028	47,172	74	**...**				
23	Finland	370,8	68,960	155	**72**	Monaco	16,5	5,265	260
24	Korea, South	370,1	7,567	37	**...**				
25	India	326,6	273	21	**99**	Malta	5,978	14,233	72
26	Brazil	310,8	1,608	15	**...**				
27	Turkey	270,7	3,794	36	**102**	Republic of Macedonia	5,485	2,668	60
28	Poland	252,9	6,639	54	**...**				
29	Mexico	212,5	1,956	20	**184**	Liechtenstein	0	0	0
30	Indonesia	196,1	837	28					

Data source: IMF - International Monetary Fund. *World Economic Outlook Database, April 2011*, Accessed on April 2011. http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx. World Bank. *World Development Indicators.* Accessed on March 2011. http://databank.worldbank.org/ddp/home.do?Step=12&id=4&CNO=2.

Note: this list is gross debt, not net debt.

2. The external debt sustainability

Sustainable debt is the level of debt which allows a debtor country to meet its current and future debt service obligations in full, without recourse to further debt relief or rescheduling, avoiding accumulation of arrears, while allowing an acceptable level of economic growth. (UNCTAD/UNDP, 1996). External-debt-sustainability analysis is generally conducted in the context of medium-term scenarios. [IMF, Debt- and Reserve-Related Indicators of External Vulnerability, Policy Paper, 2000]

World Bank and IMF hold that "a country can be said to achieve external debt sustainability if it can meet its current and future external debt service obligations in full, without recourse to debt rescheduling or the accumulation of arrears and without compromising growth". High external debt is believed to have harmful effects on an economy (Bivens, 2004:2).

There are various indicators for determining a sustainable level of external debt. Examples of debt burden indicators include the (a) debt to GDP ratio, (b) foreign debt to exports ratio, (c) government debt to current fiscal revenue ratio etc. This set of indicators also covers the structure of the outstanding debt including the (d) share of foreign debt, (e) short-term debt, and (f) concessional debt in the total debt stock.

A second set of indicators focuses on the short-term liquidity requirements of the country with respect to its debt service obligations. Examples of liquidity monitoring indicators include the (a) debt service to GDP ratio, (b) foreign debt service to exports ratio, (c) government debt service to current fiscal revenue ratio etc. The dynamic ratios show how the debt burden ratios would change in the absence of repayments or new disbursements, indicating the stability of the debt burden. An example of a dynamic ratio is the ratio of the average interest rate on outstanding debt to the growth rate of nominal GDP.

3. Trade Deficit Effects

There are two competing theories that have surfaced regarding the effects of a trade deficit on the external debt and GDP: trade deficits drag down GDP and increase the external debt, and add to the threat of an economic crisis if foreigners dump the national currency in the world currency markets; increasing trade deficits can be a sign of strong GDP or of an increase in the external debt (*Table 3*).

Table 3. Romania's Trade Deficit Vs. GDP (1990-2010)

Year	Trade Deficit Bn. ECU/EUR	GDP Bn. ECU/EUR	Year	Trade Deficit Bn. ECU/EUR	GDP Bn. ECU/EUR
1990	-3,399	39,4619	**2001**	-6,111	45,3568
1991	-0,964	35,2199	**2002**	-5,781	48,6149
1992	-1,094	25,4194	**2003**	-7,356	52,5765
1993	-0,985	30,7984	**2004**	-5,323	61,0639
1994	-0,343	46,6046	**2005**	-7,805	79,8019
1995	-1,215	28,7358	**2006**	-11,760	97,751
1996	-1,973	29,0251	**2007**	-17,665	124,7285
1997	-1,753	31,4854	**2008**	-18,372	139,7654
1998	-2,318	37,4364	**2009**	-6,871	117,4574
1999	-1,187	33,7661	**2010**	-7,590	121,9424

Year	Trade Deficit Bn. ECU/EUR	GDP Bn. ECU/EUR	Year	Trade Deficit Bn. ECU/EUR	GDP Bn. ECU/EUR
2000	-4,149	40,6513			

Data source: Eurostat. Accessed during March-April 2011. http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database; Giurgiu, 2008, Annex 25-26.

According to the *Table 3*, from the early 1990s to 2008, Romania continues on a general trend of increasing GDP year over year, while the trade deficit is also increasing. *Table 3* may hold much more weight as evidenced by the positive correlation between the Romanian GDP and the trade deficit. As more manufacturing and labor intensive products are created outside of Romania, a trade imbalance may be inevitable. In fact, an imbalance of trade in the form of a deficit does not drag the economy.

As the host economy contracts or even as it expands, demand for imports and oil grows at a faster rate than the demand in other countries for the host's products grows. A weaker national currency can shrink the trade imbalance and increase GDP growth as local companies find more success in exporting their products and local customers tend to pass on foreign goods as their prices rise.

4. Some previos studies and research models

There are some studies which have examined the relationship between trade deficit and external debt. While Chowdhury (1994) found that the external debt of developing countries is not the primary cause of economic slow down, Savvides (1992) stated that the debt induced taxation of capital decreases net returns to investment in indebted countries. Bullow-Rogoff (1990) claim that the external debt of developing countries is not a primary cause of trade deficit and of the economic slow down.

This paper examines the interaction among external trade deficit and the external debt service using time series data for Romania and using a multi-equation model. The discussion of previous studies shows that the relationship between external debt and external trade deficit is not simple since many variables used for estimation might be endogenous and the impact of external debt on trade balance may have both direct and indirect effects.

Starting from the case of Metwally and Tamaschke (1994), we analyse the interactions among debt servicing and external trade balance for Romania, after 1990.

The external debt service is determined by the export growth rate, exchange rate, the growth in external debt stock, and economic growth. The export growth has also been included in the debt service equation, because for a typical developing country, exports represent a significant source of foreign exchange earnings and hence a source for the debt service burden. Thus we expect debt service to decrease when growth of exports increases. Furthermore, increasing exports may relax the foreign resources restriction and increase the productivity of the other production inputs. Feder (1982) asserts that this occurs via two channels: - higher marginal productivity and externalities -through which rapid export growth can effect the rate of economic growth in excess of the contribution of net export growth to GNP. For heavily indebted nations, growth in exports only led to the payments of interest and principal on the debt which inhibited incentives for investment and growth in developing countries. Afxentiou (1993) shows that the ability of countries to pay their debts depends upon *ceteris paribus* conditions, based on a comparison between their export growth rates and interest rates on their foreign debt. As long as the export growth rates are higher than the interest rate on external debt, the ability to pay of countries improves and borrowers can service their debt without sacrificing any of their own national resources. Likewise, when the export growth rates are lower than the interest rates on external debt and the ability to pay of countries are worsened, any increase in exports, will decrease debt service, when other things are being equal.

5. Conclusion

This paper has investigated the interactions among the external debt service and the external trade balance, respectively, the trade deficit, in Romania between 1990-2010, by using simultaneous equation estimation methods. The results show that the higher the imports, the higher the external debt, and as a consequence, the higher the balance of trade deficit, if the productivity is low. This result is consistent with the Romanian experience, and its implications are very large and will multiply over the years, if there will be no adequate policies meant to revival the private sector, mainly the SMEs.

In this respect, the paper concludes that the Romanian government should immediately take the necessary measures to facilitate the easy access to capital for the private investors, which will further stimulate the internal production, with a direct impact onto the increase of exports, which will determine on the one hand, the reduction of the balance of trade deficit and simultaneous, the increasing of the necessary budgetary revenues to pay back the external debt. Otherwise, all costs will be supported by the next generations, with no return, if the probability for declaring "default" will be successfully surpass in the short run.

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